

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/078,555

REMARKS

Summary Of The Office Action

Claims 1-41 are in the application.

Claims 1-23, 26-27, 30, 34 and 37 have been cancelled.

Claims 24-25, 28-29, 31-33, 35-36, 38-41 are rejected under 35 U.S.C. § 112, first paragraph, as being allegedly based on a disclosure which is not enabling. Applicant respectfully traverses this rejection.

Analysis of the Rejection Under 35 U.S.C. § 112, First Paragraph

In rejecting claims 24-25, 28-29, 31-33, 35-36, 38-41 under 35 U.S.C. § 112, first paragraph, the Examiner states that, "Identifying a direct DC component, controlling operation mode, DC offset critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure." Applicant respectfully disagrees with the Examiner for at least the following reasons.

An earlier Office Action (Paper No. 11) contained a similar rejection. In that Office Action, the Examiner rejected claims 23-40 under 35 U.S.C. § 112, first paragraph, alleging that the claims "contain subject matter which was not described in the specification in such a way as to reasonably convey to one of ordinary skill in the art that the inventors, at the time the application was filed, had possession of the claimed invention. The method of controlling the operation mode of and equalizer added in response to the identification of DC component of the

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received signal added in specification and claims raise new subject matters and issues.” In response to that rejection, it was argued that the identification of the DC component of the received signal is fully supported throughout the specification. In particular, it was argued:

The identification of the DC component of the received signal, identified by the Examiner as unsupported, is fully supported throughout the specification. As disclosed in the specification at page 6 lines 19-30 and page 16 lines 4-19, a pilot detector senses the presence of a pilot carrier accompanying a digital HDTV signal of the VSB type. The pilot carries a DC signal. The detector output indicates whether the received signal is a VSB signal (page 16, line 20) or a QAM signal (page 17, line 12).

At page 1 lines 6-11, the pilot carrier wave is described as a wave of fixed amplitude wherein the amplitude corresponds to a prescribed percentage of modulation. One of ordinary skill in the art would appreciate that the pilot carrier wave, as described above, is equivalent to a direct current offset component. The identification of the DC offset component, therefore, is fully supported by the original specification which terms the DC offset component as a pilot carrier signal.

Furthermore, Figure 1 depicts the pilot carrier presence detector. This detector determines whether the HDTV signal is of the QAM type or VSB type. The detector determines that a signal is of the VSB type when the received signal is accompanied by a DC offset component or pilot carrier. In light of the present evidence, the identification of the DC component of the received signal is fully disclosed and supported in the original specification.

The Examiner also argues that controlling the operating mode of the equalizer in response to the identification of a DC offset component is not described in the specification in an enabling manner.

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Again, Applicant respectfully traverses this rejection.

Page 6 lines 19-28 describe how the operating mode of the present invention is controlled by the identification of a DC offset component. Specifically, the specification states:

"a detector is provided for determining whether the final IF signal is a QAM signal or a VSB signal to generate a control signal, which is in a first condition when the final IF signal is a QAM signal and is in a second condition when the final IF signal is a VSB signal. Responsive to the control signal being in its first condition, the radio receiver is automatically switched to operate in a QAM signal reception mode; and responsive to the control signal being in its second condition, the radio receiver is automatically switched to operate in a VSB signal reception mode. This detector is one which senses the presence of a pilot carrier accompanying a digital HDTV signal of VSB type in certain preferred embodiments of the invention."

Furthermore, Figure 2 shows a DC level from detector 34 controlling the operating mode of the equalizer 36. The equalizer, as described at page 17 lines 25-30 and page 18 lines 1-5, is "arranged to provide a flat amplitude-versus-frequency characteristic in response to the VSB pilot carrier presence detector indicating the absence of pilot carrier and the VSB training signal selected by the data sync recovery circuitry is wired through the data sync selector without need for a multiplexer."

The above issues were appealed and the Board of Appeals refused to sustain the rejection of claims 23-40 under 35 U.S.C. § 112, first paragraph. Because similar issues are now raised in the present Office Action, Applicant respectfully submits that the above arguments, which the

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Board of Appeals found to be persuasive, should be considered to be persuasive now by the Examiner.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

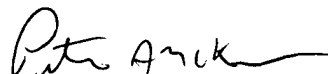
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